

IFW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

LITTLE et al

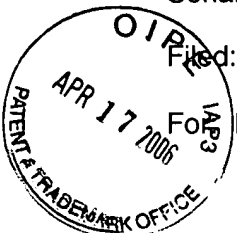
Atty. Ref.: 4702-17

Serial No. 10/538,123

TC/A.U.: 2874

Filed: June 7, 2005

Examiner: Unassigned



For PROCESS FOR THE PRODUCTION OF OLEFINS

\* \* \* \* \*

April 17, 2006

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT**

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO/SB/08a.

This is not to be construed as a representation that a search has been made or that no better prior art exists, or that a reference is relevant merely because cited.

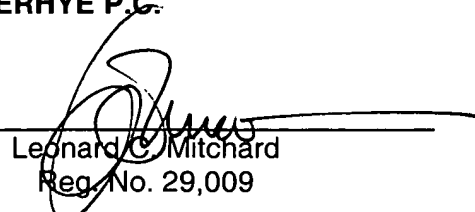
The Examiner is requested to initial the attached form PTO/SB/08a and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

The Commissioner is hereby authorized to charge any deficiency in the fees submitted in this matter, or credit any overpayment, to our Deposit Account No. **14-1140**. A duplicate of this paper is attached for possible Financial Branch use.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_

  
Leonard C. Mitchard  
Reg. No. 29,009

LCM:lfm  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

Sheet 1 of 1

INFORMATION DISCLOSURE  
CITATION

ATTY. DOCKET NO.

SERIAL NO.

4702-17

10/538,123

APPLICANT

LITTLE et al

(Use several sheets if necessary)

FILING DATE

TC/A.U.

June 7, 2005

2874

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,214,226	05/1993	Bauer et al			
	4,952,743	08/1990	Come			
	4,754,095	06/1988	Coughenour et al			
	4,349,432	09/1982	Rowe et al			
	4,166,830	09/1979	Guth et al			
	3,692,862	09/1972	Staud et al			

## FOREIGN PATENT DOCUMENTS

DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
EP 1 112 241 B1	02/2003	EP			
WO 00/14036	03/2000	WO			
EP 0 983 790 A2	03/2000	EP			
EP 0 336 823 A1	10/1989	EP			
EP 0 332 289 A2	09/1989	EP			
GB 2 227 249 A	07/1990	GB			
GB 794,157	04/1958	GB			

## OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

	<i>Chemical Week</i> ; pp. 72-73; January 23, 1965.
	Sampson, R.J.; "The Reaction Between Ethane and Oxygen at 600-630°"; pp. 5095-5106 (1963).
	Asinger, F.; "Mono-olefins: chemistry and technology"; pp. 80-88 (1968).
	Calderbank, P.H., et al; "The Autothermic Cracking of Light Hydrocarbons"; <i>J. Applied Chemistry</i> ; Vol. 7; pp. 425-431; August 1957.
	Rabitz, H., et al; "Optimal control of methane conversion to ethylene"; <i>Journal of Physical Chemistry A</i> ; 104/46; pp. 10740-10746 (abstract).
	Ross, J.R.H., et al; "Catalytic conversion of methane to higher hydrocarbon(s) by exothermal reaction – coupled with endothermal conversion of hydrocarbon(s) and carbon dioxide or stream in second reactor in heat exchange contact with first reactor"; NL 9300168 (abstract).
	"Ethylene and Propylene Prod. – By Cold-Flame Oxidation of Butane with Air in Two/Stage Reactor"; SU-1255616 (abstract).
	"Prod. Of Propylene – By Oxidn. Of Propane in Two / Stage Process Using Higher Temp. In Sec. Stage"; SU-1348329 (abstract).
	"Unsatd. Hydrocarbons production – from petrol-ligroin fraction by two – stage pyrolysis with partial intermediate cooling"; SU-518141 (abstract).
	"Thermally cracking hydrocarbon(s) – involves supplying cracked oil from 1 <sup>st</sup> reactor into 2 <sup>nd</sup> internally heated at higher temperature"; JP-60235890 (abstract).
	"Decomposing raw hydrocarbon material to ethylene – by burning in presence of oxygen, passing mixture to high temperature zone and then cooling"; JP-56034790 (abstract).
	"Heating methane cracking reactor – involves use of combustion exhaust gas in combustion of further fuel"; JP-89017043 (abstract).

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.